

Theresa Newman, Hearing Officer
DNREC — Office of the Secretary
89 Kings Highway, Dover, DE 19901

October 6, 2023

Mrs. Newman,

I wanted to reach out and provide my own perspective on the regulatory changes that are being proposed for shellfish aquaculture here in Delaware. My involvement with aquaculture is greater than many, as I have been involved with aquaculture since the 1990s when I was first introduced to the subject in an undergraduate course. This course changed the path of my life and ultimately led me to a career in this field. Over the years, I have had the privilege of learning a lot about aquaculture around the world through farm visits, participation in national and international professional meetings, and farm tours across the globe. It is from this perspective that I offer my comments.

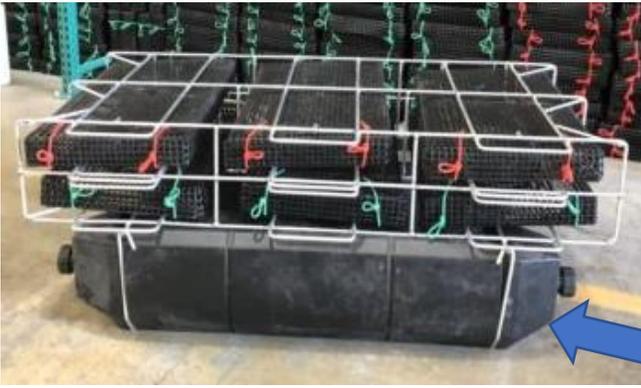
The effects of regulatory burdens on aquaculture is a topic of utmost importance to the continued growth and expansion of domestic aquaculture. The National Aquaculture Association has a page (<https://www.nationalaquaculture.org/aquaculture-regulatory-burden/>) on their website dedicated to this topic if you wish to find out more about these impacts nationwide. Here in DE where shellfish aquaculture is a new industry that is comprised of small, independent owner/operators, regulations have an outsized impact on these farmers' ability to be successful. In short, I would request that you consider amending the proposed Shellfish Aquaculture Regulations to include three critical modifications that will help increase industry expansion and contribute to environmental benefits in the Inland Bays: 1) reduce the minimum annual planting requirement, 2) eliminate redundant marking requirements for certain gear types, and 3) not specify float color for gear where marking floats are required.

1) Oyster Planting Requirements

While I applaud DNREC for including an active-use clause in the Inland Bays shellfish aquaculture regulations, the current planting requirement of 100,000 oysters per acre per year is excessive. In addition to purchasing enough gear to grow 100,000 oysters per acre, these new growers are learning, through trial and error, how to properly manage their farms, and also trying to develop markets for their product. **Lowering the planting requirement to 50,000 oysters per acre per year will still ensure active commercial use of leased acres**, but will also not over tax new growers while they are building their businesses. A reduced planting requirement will decrease business start-up costs significantly and encourage more individuals to get involved in this industry. Further, this will allow individual growers to expand their production at a pace that is manageable for them given available labor, markets, and capital, helping them be more financially solvent as they grow.

2) Eliminate Marking Floats on Floating and Long-Line Gear

DNREC's marking requirement for leased shellfish acreage is some of the most stringent in the nation, requiring each corner of each leased acre be marked with a 4" PVC pole extending above the water surface and be marked with a placard. The rationale here is that the area needs to be clearly delineated so that other Inland Bays users are aware that this area is in use for shellfish aquaculture. Given this requirement, it is unnecessarily redundant to also require marking floats on floating cages and Australian long line cages. Floating cages, by design, already have floats attached to one or both sides to provide buoyancy, and Australian long line cages are suspended on a cable between two or more posts to maintain their position in the water column (see images below). Adding supplemental floats to these cages increases farmer expense and they get in the way during cage cleaning and harvest, while only providing negligible benefit given the other marking requirements (4" PVC poles at each corner of each acre of the lease, and signs).



FLOATS FROM MANUFACTURER



AUSTRALIAN LONGLINE STYLE CAGES

Pictures of various styles of aquaculture gear, including floating cages that come with black plastic floats from the manufacturer, as well as Australian longline style cages that require posts to hold up the cages for desiccation.

3) Do Not Specify Float Color on Bottom Cages

Where floats are necessary, as for bottom cages, current regulations specify the use white floats. White floats are more expensive than orange or yellow floats of the same shape and size, and provide no tangible benefit in terms of safety or utility. Float color therefore should be mandated, as white floats unnecessarily increases the cost associated with meeting this regulatory requirement. Here again, with each lease acre having corners marked with a 4" PVC poles and signs, individual boaters should easily recognize that this area is in use for shellfish aquaculture.

As we approach the 10-year mark for shellfish aquaculture in the Inland Bays we have a better understanding of the impact of the existing regulations on the growth of this industry. It is my opinion that the above requested changes will help alleviate some of the challenges to current shellfish farmers, and attract additional growers. Currently, only 23 of the 343 pre-permitted acres (as of 2021) available for shellfish aquaculture in the Inland Bays are presently being used. My desire is to see the expansion of coastal businesses and related environmental improvements associated with an increase in shellfish aquaculture here in Delaware. Your consideration in the adjustment of these regulations has the potential to help improve the economy and the environment in our state.

Respectfully,

Dennis McIntosh, Ph.D.